

MINUTES

Well Constructor Continuing Education Committee Thursday, October 7, 2010

Committee Members Present: Greg McInnis, Dennis Daugherty, Kris Byrd, Angela Garner
(Dennis Daugherty was present via teleconference call)

Others Present: Tracy Fox, Nancy Sippel

A) Cont. Ed. Committee Meeting Minutes

The draft minutes from the July 7, 2010, meeting were reviewed. McInnis motioned to approve the revised draft minutes as is, Garner seconded. The vote was all in favor.

B) Other Issues

None

C) Review of Applications

The Cont. Ed. Committee reviewed the courses that comprise the **“WSGWA 2010 Convention”** held **October 7-9, 2010**, in **Pasco, Washington, (WA)**. The convention is sponsored by the **Washington State Ground Water Association (WSGWA)**. The courses were reviewed as follows:

- **“2008 NEC Update for Pump Installers” eight (8) hours, October 7, 2010.** The instructor is Mike Weitzel. Byrd motioned to assign **four (4) CECs**, Daugherty seconded. The vote was all in favor.
- **“Load Securement & Vehicle Inspection” three (3) hours, October 8, 2010.** The instructor is Gene McDaniel, WA State Department of Transportation or other WA DOT staff. McInnis motioned to assign **three (3) CECs**, Garner seconded. The vote was all in favor.
- **“Legislative & On-Site Water Issues Right Now” one (1) hour, October 8, 2010.** The instructor is Glen Smith and various drillers. Garner motioned **not to assign CEC**, Byrd seconded. The vote was all in favor.
- **“Round Table & Breakfast” two (2) hours, October 9, 2010.** McInnis motioned **not to assign CEC**, Garner seconded. The vote was all in favor. Sponsor can provide additional information.
- **“Safety on the Jobsite” one (1) hour, October 9, 2010.** The instructor is Paul Anderson, Anderson Drilling LLC. Byrd motioned to assign **one (1) CEC in the safety/first aid/CPR category**, Daugherty seconded. The vote was all in favor.
- **“You Drill A Hole – You Develop A Well” one (1) hour, October 9, 2010.** The instructor is Mike Mehmert. McInnis motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Welding Safety & New Engine Drive Technology” one hour 30 minutes, October 9, 2010.** The instructor is Karl Susz, Lincoln Electric. McInnis motioned

to assign **1.5 CECs**, Byrd seconded. The vote was all in favor.

- **“RCW/WAC Update” eight (8) hours, October 9, 2010.** The instructor is Mike Weitzel. Byrd motioned **not to assign CEC**, Garner seconded. The vote was all in favor.

The Cont. Ed. Committee reviewed the courses that comprise the **“2010 OGWA Fall Convention”** scheduled for **October 15-16, 2010**, in **Redmond, Oregon (OR)**. The convention is sponsored by the **Oregon Ground Water Association (OGWA)**. The courses were reviewed as follows:

- **“Exempt Use Recording Update and Ground Source Heat Borings” one (1) hour, October 15, 2010.** The instructor is Doug Woodcock, Oregon Water Resources Department. Byrd motioned to assign **one (1) CEC in the OR gw/well laws category**, McInnis seconded. The vote was all in favor.
- **“Integrated Water Resources Strategy Workshop” one (1) hour, October 15, 2010.** The instructor is Brenda Bateman, Oregon Water Resources Department. Garner motioned to assign **one (1) CEC in the OR gw/well laws category**, Byrd seconded. The vote was all in favor.
- **“Rainwater Harvesting 101 – diversifying opportunities with rainwater harvesting technology” one (1) hour, October 15, 2010.** The instructors are Jason Garvey, Portland Purple Water LLC and Mark Scheufler, United Pipe & Supply Company. Byrd motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
- **“Roundtable Discussion – Staying Afloat in Rough Waters – boosting business in winter months, gearing up, advertising, cold weather specials, etc” one (1) hour, October 15, 2010.** Facilitated by M & S members of the OGWA. McInnis motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
- **“Basic Water Chemistry in Groundwater – what to test for, what do the numbers mean, how can the water quality change, what should I inform my customer about” one (1) hour, October 15, 2010.** The instructor is Allen Hurtado, United Pipe & Supply Company. Daugherty motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
- **“Time Management – Getting Down to Business...learn how to qualify and prioritize tasks in your daily business routine” one (1) hour, October 15, 2010.** The instructor is Bob Petersen, United Pipe & Supply Company. Garner motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Contract Workshop – writing or updating a well drilling contract, pump service order contract and water treatment contract” one (1) hour, October 16, 2010.** The instructor is Wyatt E. Rolfe, Schroeder Law Offices. McInnis motioned to assign **one (1) CEC in the OR gw/well laws category**, Garner seconded. The vote was all in favor.
- **“Health & Liability Insurance Today and in the Future – can you afford the coverage, at what cost and are there options?” (Q & A session) one (1) hour,**

October 16, 2010. The instructors are Erik Finrow and Doc Dumars, Ward Insurance. McInnis motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.

- **“Cost vs Price – Do You Know the Difference?” two (2) hours, October 16, 2010.** The instructor is Steve Kaser, Forge Pacific LLC. Garner motioned to assign **two (2) CECs**, Byrd seconded. The vote was all in favor.

The Cont. Ed. Committee reviewed the courses that comprise the **“2010 CGA Convention & Trade Show”** scheduled for **November 4-6, 2010**, in **Sparks, Nevada (NV)**. The convention is sponsored by the **California Groundwater Association (CGA)**. The courses were reviewed as follows:

- **“Geology/Hydrology, Geophysical Logs, Well Construction, and Groundwater Monitoring” six hours 30 minutes, November 4, 2010.** The instructors are Jeremy Wire, Geoconsultants, Inc. and Mark Sharpless, Welenco/Water Well Technology. McInnis motioned to assign **seven (7) CECs**, Byrd seconded. The vote was all in favor.
- **“Ground Source Heat Pump Construction (advanced)” six hours 30 minutes, November 4, 2010.** The instructors are David Henrich, Bergerson-Caswell, Inc.; Stewart Krause, Wyo-Ben, Inc., and Jeff Bowen, Geo-Loop Inc. Byrd motioned to assign **seven (7) CECs**, Daugherty seconded. The vote was all in favor.
- **“Pentair Water VFD Analysis and Applications” two (2) hours, November 5, 2010.** The instructor is Rick Hicklin, Pentair. Daugherty motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Franklin Electric VFD Analysis and Applications” two (2) hours, November 5, 2010.** The instructor is Matt Moore, Franklin Electric. Daugherty motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Accident Causes and Body Parts Costs” two (2) hours, November 5, 2010.** The instructors are Cathie Hastings, State Compensation Insurance Fund and Bruce Anderson, Safety Center Inc. McInnis motioned to assign **two (2) CECs**, Garner seconded. The vote was all in favor.
- **“Pump Efficiency Testing” two (2) hours, November 5, 2010.** The instructors are Emil Worm, L.O. Lynch Quality Wells & Pumps, and Tim Guishard, Tim Guishard Enterprises. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Well Blasting” two (2) hours, November 6, 2010.** The instructor is Bob Guardino, Water Well Technology & Welenco. Garner motioned to assign **two (2) CECs**, McInnis seconded. The vote was all in favor.
- **“Maps & GPS Usage” two (2) hours, November 6, 2010.** The instructor is Scott Lewis, Luhdorff & Scalmanini Consulting Engineers. Byrd motioned to assign **two (2) CECs**, Daugherty seconded. The vote was all in favor.
- **“Tools of the Trade Demo: Specialty Downhole Cameras” 30 minutes, November 5, 2010.** The instructor is Bob Guardino, Water Well Technology &

Welenco. Byrd motioned to assign **0.5 CEC**, McInnis seconded. The vote was all in favor.

- **“Tools of the Trade Demo: Grundfos R-100” 30 minutes, November 5, 2010.** The instructor is James Edwards, Grundfos Pumps. McInnis motioned to assign **0.5 CEC**, Byrd seconded. The vote was all in favor.
- **“Tools of the Trade Demo: Wire & Motor Resistance Testing” 30 minutes, November 5, 2010.** The instructor is Gary Moyer, Preferred Pump & Equipment. McInnis motioned to assign **0.5 CEC**, Daugherty seconded. The vote was all in favor.
- **“Tools of the Trade Demo: Water Jet Well Cleaning” 30 minutes, November 6, 2010.** The instructor is Paul Phelps, Hydro Pressure Corp. Garner motioned to assign **0.5 CEC**, McInnis seconded. The vote was all in favor.
- **“Tools of the Trade Demo: Solids Control (mud drilling)” 30 minutes, November 6, 2010.** The instructors are Blake Fahl, Laibe Corp and Tony Tibban, Tibban Mfg, Inc. Mud Puppy Intl. Byrd motioned to assign **0.5 CEC**, Garner seconded. The vote was all in favor.
- **“Tools of the Trade Demo: Pinpointing Well Contamination” 30 minutes, November 6, 2010.** The instructor is Michael Guardino, Welenco. Inc. Byrd motioned to assign **0.5 CEC**, Garner seconded. The vote was all in favor.

The Cont. Ed. Committee reviewed the courses that comprise the **“2010 NGWA Ground Water Expo”** scheduled for **December 7-10, 2010**, in **Las Vegas, NV**. The convention is sponsored by the **National Ground Water Association (NGWA)**. The courses were reviewed as follows:

- **“Appraisals and Your Business Value” one (1) hour, December 7, 2010.** The instructor is Michael A. Salvadore Jr, Salvadore Auctions Inc. and Kingfish Capital Advisors, LLC. Daugherty motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“GPS: An Effective Tool for Well Location” one (1) hour, December 7, 2010.** The instructor is Steve Hatfield, GeoShack. Byrd motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“How the New Tax Laws Will Affect You” one (1) hour, December 7, 2010.** The instructor is Mark Van Benschoten, Rea and Associates Inc. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Market Your Business by Raising Public Awareness on Facebook” one (1) hour, December 7, 2010.** The instructor is Cliff Treyens, NGWA. McInnis motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
- **“Profit Mastery: Break-Even 360 Degrees: The Absolute Best Tool to Drive Profitability” one (1) hour 30 minutes, December 7, 2010.** The instructor is Steve LeFever, Business Resource Service Inc. Daugherty motioned to assign **1.5 CECs**, McInnis seconded. The vote was all in favor.
- **“Profit Mastery: The Most Important Thing to Do Now!” two (2) hours 15**

- minutes, December 7, 2010.** The instructor is Steve LeFever, Business Resource Service Inc. Garner motioned to assign **2.5 CECs**, McInnis seconded. The vote was all in favor.
- **“Protecting Your Water Supply and Your Bottom Line: Shifting Treatment Costs From Ratepayers to Polluters” one (1) hour, December 7, 2010.** The instructor is Alexander Leff, Sher Leff LLC. McInnis motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
 - **“The 21st Century Contractor” one (1) hour, December 7, 2010.** The instructor is Roger E. Renner, E.H. Renner & Sons Inc. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
 - **“Tools of the Trade” one (1) hour, December 7, 2010.** The instructor is John Pitz, NL Pitz Inc. Byrd motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
 - **“Tools of the Trade: How Manufacturers and Suppliers Can Help Their Customers Stay in Business” one (1) hour, December 7, 2010.** The instructor is John Pitz, NL Pitz Inc. McInnis motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
 - **“Who Is Really an Independent Contractor?” one (1) hour, December 7, 2010.** The instructor is Mark Van Benschoten, Rea and Associates Inc. Garner motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
 - **“Beating Reactive Soil Conditions” one (1) hour, December 7, 2010.** The instructor is George M. Dugan, CETCO Drilling Products. Byrd motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
 - **“Best Suggested Practices for Groundwater Sampling” one (1) hour 30 minutes, December 7, 2010.** The instructor is Jonathan Jenkins, NGWA. Garner motioned to assign **1.5 CECs**, Byrd seconded. The vote was all in favor.
 - **“Drilling High Capacity Water Wells, Southwestern Style” one (1) hour, December 7, 2010.** The instructor is Gary L. Hix, In2Wells, LLC. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
 - **“Economic Benefits of Flexible Drop Pipe in Water Wells” one (1) hour, December 7, 2010.** The instructor is Tanner Tryon, Hose Solutions. Garner motioned to assign **0.5 CEC**, McInnis seconded. The vote was all in favor.
 - **“Filter Selection Guidelines for Optimum Performance” one (1) hour, December 7, 2010.** The instructor is Randy D. Delenikos, LAKOS Separators & Filtration Systems. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
 - **“Hydrogeology 101” one (1) hour, December 7, 2010.** The instructor is W. Richard Laton, California State University-Fullerton. Byrd motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
 - **“NGWA’s Official Glossary of Industry Terms: Applications to Your Work” one (1) hour, December 7, 2010.** The instructor is Kevin B McCray, NGWA. McInnis motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.

- **“The Calculation of Plumbness and Alignment” one (1) hour, December 7, 2010.** The instructor is Gary W. Corbell. Daugherty motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Understanding IADC Codes for Tricone Bits” one (1) hour, December 7, 2010.** The instructor is Tim Thomas, Bit Brokers International. Byrd motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
- **“Considering Getting Into Geothermal Drilling? It’s More Than Just a Hole In the Ground” one (1) hour, December 7, 2010.** The instructor is Richard E. Clarke, SIMCO Drilling Equipment Inc. Garner motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
- **“Designing and Installing Well and Loop Systems in Florida’s Karst Terrain” one (1) hour, December 7, 2010.** The instructor is James M. Frazee Jr., St. Johns River Water Management District. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
- **“High-Capacity Standing Column Geothermal Well-Liberty Island Case Study” one (1) hour, December 7, 2010.** The instructor is Steven B. Gross, CertainTeed. McInnis motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Specialized Equipment Makes the Pressure Testing, Installation, and Grouting of Geothermal Loops Easier, Faster, and Safer” one (1) hour, December 7, 2010.** The instructor is Todd Giddings, Todd Giddings and Associates Inc. Garner motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Experiencing Water in Architecture and Urban Planning” three (3) hours, December 7, 2010.** The instructor is Ryan Taylor, taylor28design LLC. Discussion: question how this would apply for a well constructor. Garner motioned **not to assign CEC**, Byrd seconded. The vote was all in favor.
- **“Solar Powered Pumping” one (1) hour, December 7, 2010.** The instructor is Larry Seitter, Grundfos Pumps Corp. Daugherty motioned to assign **0.5 CEC**, McInnis seconded. The vote was all in favor.
- **“Using a Regional Building Code Enforcement Agency to Protect Groundwater Quality: An Innovative Approach” one (1) hour, December 7, 2010.** The instructor is Todd Giddings, Todd Giddings and Associates Inc. McInnis motioned **not to assign CEC**, Garner seconded. The vote was all in favor.
- **“Water in Architecture and Urban Planning: A Balance of Technology and Behavior” one (1) hour, December 7, 2010.** The instructor is Ryan Taylor, taylor28design LLC. McInnis motioned **not to assign CEC**, Garner seconded. The vote was all in favor.
- **“Applications of Solar Water Pumping” one (1) hour, December 7, 2010.** The instructor is Lynn Hicks, Innovative Solar Solutions. McInnis motioned to assign **0.5 CEC**, Byrd seconded. The vote was all in favor.
- **“Being Prepared for a DOT Inspection” one (1) hour, December 7, 2010.** The instructor is Gary LaBrake, On the Road. McInnis motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“CSA 2010” one (1) hour, December 7, 2010.** The instructor is Gary LaBrake, On

- the Road. McInnis motioned to assign **one (1) CEC in the safety/first aid/CPR category**, Garner seconded. The vote was all in favor.
- **“Fleet Safety: Preventing Common Water Well Driller Fleet Accidents” one (1) hour, December 7, 2010.** The instructor is Joseph J. Hogan, The Hartford Insurance Group. McInnis motioned to assign **one (1) CEC in the safety/first aid/CPR category**, Garner seconded. The vote was all in favor.
 - **“Living with OSHA: OSHA and Your Business” one (1) hour, December 7, 2010.** The instructor is Joseph J. Hogan, The Hartford Insurance Group. Garner motioned to assign **one (1) CEC in the safety/first aid/CPR category**, McInnis seconded. The vote was all in favor.
 - **“Lock-out/Tag-out for Water Well Drillers” one (1) hour, December 7, 2010.** The instructor is Joseph J. Hogan, The Hartford Insurance Group. Garner motioned to assign **one (1) CEC in the safety/first aid/CPR category**, Daugherty seconded. The vote was all in favor.
 - **“Aquifer Characterization Tests and Transducer Data Collection” one (1) hour, December 7, 2010.** The instructor is Jim Broderick, In-Situ Inc. Garner motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
 - **“Developing and Monitoring Groundwater Resources in the Republic of Botswana” one (1) hour, December 7, 2010.** The instructor is Kathleen M. Wiseman, Water Systems Engineering Inc. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
 - **“Dissolved Oxygen Sensing Technologies” one (1) hour, December 7, 2010.** The instructor is Tim Grooms, YSI Inc. McInnis motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
 - **“Fluid Data Management Including Real-Time Data Retrieval Via Satellite Telemetry” one (1) hour, December 7, 2010.** The instructors are James Butler, Dynotek and Bruce Bacon, AMCi. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
 - **“Impacts of Shale and Coalbed Gas Extraction on Groundwater” one (1) hour, December 7, 2010.** The instructor is Andrew Stone, American Ground Water Trust. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
 - **“Total Water Management on the Barrier Island Complex, Currituck County, North Carolina” two (2) hours, December 7, 2010.** The instructor is Edwin E. Andrews, Edwin Andrews & Associates PC. McInnis motioned to assign **two (2) CECs**, Daugherty seconded. The vote was all in favor.
 - **“Using Sand Tank Models to Teach About Groundwater” one (1) hour, December 7, 2010.** The instructor is W. Richard Laton, California State University-Fullerton. Garner motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
 - **“Common Contaminants, Treatment Options, and Chlorination Calculations” one (1) hour, December 7, 2010.** The instructor is Tate A. Burckhardt, Better Water Industries Inc. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The

vote was all in favor.

- **“Is There Lead In Your Water Supply?” one (1) hour, December 7, 2010.** The instructor is Ivars Jaunakais, Industrial Test Systems Inc. Garner motioned to assign **one (1) CEC**, Byrd seconded. The vote was all in favor.
- **“Improving Well Pumping System Efficiency” one (1) hour, December 7, 2010.** The instructor is Diego A. Narvaez, Schlumberger. Garner motioned to assign **0.5 CEC**, Daugherty seconded. The vote was all in favor.
- **“Smart Pumping Workshop” one (1) hour, December 7, 2010.** The instructor is Sean Fitzpatrick, Schneider Electric. Garner motioned to assign **0.5 CEC**, McInnis seconded. The vote was all in favor.
- **“Study of Variable Speed Drives (VFD) in Motor-Pump Applications” one (1) hour, December 7, 2010.** The instructor is Michael Sadeghi, Faradyne Motors. Daugherty motioned to assign **0.5 CEC**, Garner seconded. The vote was all in favor.
- **“Iron Oxidizing Bacteria in the Well Environment” one (1) hour, December 7, 2010.** The instructor is Kathleen M. Wiseman, Water Systems Engineering Inc. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Microbial Groundwater Quality and the Importance of Effective Well Maintenance” one (1) hour, December 7, 2010.** The instructor is Neil Mansuy, Subsurface Technologies Inc. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Designing More Effective Well Systems” one (1) hour, December 7, 2010.** The instructor is Michael Schnieders, Water Systems Engineering Inc. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Water Well Design Parameters of Various Types of Aquifers” one (1) hour, December 7, 2010.** The instructor is Christopher Harich, University of Southern California and the Roscoe Moss Company. Garner motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
- **“FMCSA: Getting Your DOT Account In Order Lab” one (1) hour, December 7, 2010.** The instructor is Gary LaBrake, On the Road. McInnis motioned to assign **one (1) CEC**, Garner seconded. The vote was all in favor.
- **“Water Well Hydrofracking” one (1) hour, December 7, 2010.** The instructor is Sean Kyle, Kyle Equipment Co. Byrd motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
- **“Strengthening Your Brand During Tough Economic Times” two (2) hours, December 7, 2010.** The instructor is Michael Doyle, Iron Brand. McInnis motioned to assign **two (2) CECs**, Garner seconded. The vote was all in favor.
- **“Best Suggested Practices for Well and Pump System Operation and Maintenance” one (1) hour 30 minutes, December 8, 2010.** The instructor is Jonathan Jenkins, NGWA. McInnis motioned to assign **1.5 CECs**, Garner seconded. The vote was all in favor.
- **“ConsensusDOCS and High Capacity Pumps” one (1) hour, December 8, 2010.**

The instructor is Donald Gregory, Degler Brown Hill & Ritter. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.

- **“Well Efficiency and High Capacity Pumps” one (1) hour, December 8, 2010.** The instructor is David Kill, Goulds Pumps. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Lost Afganistan” one (1) hour, December 8, 2010.** The instructor is Marvin (Nick) Saines, Saines Environmental Hydrogeology. Byrd motioned **not to assign CEC**, McInnis seconded. The vote was all in favor.
- **“Preventable or Unpreventable?” two (2) hours, December 8, 2010.** The instructor is Joseph J. Hogan, The Hartford Insurance Group. Byrd motioned to assign **two (2) CECs in the safety/first aid/CPR category**, Daugherty seconded. The vote was all in favor.
- **“Bringing Safe Drinking Water to Underdeveloped Countries - What Have We Learned So Far” one (1) hour 30 minutes, December 8, 2010.** The instructor is Ralph L. Taylor Jr., Taylor Drilling Co. McInnis motioned **not to assign CEC**, Byrd seconded. The vote was all in favor.
- **“Groundwater Exploration and Development in a War Zone: Report from Afghanistan” one (1) hour, December 8, 2010.** The instructor is Marvin (Nick) Saines, Saines Environmental Hydrogeology. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Beyond the Black Box: Integrating Advanced Characterization of Microbial Processes with Subsurface Reactive Transport Models” (This is the 2010 NGWREF Darcy Distinguished Lecturer) one (1) hour 30 minute, December 8, 2010.** The instructor is Timothy D. Scheibe, Pacific Northwest National Lab. McInnis motioned to assign **1.5 CECs**, Daugherty seconded. The vote was all in favor.
- **“Chemical and Biological Fouling of Water Wells” one (1) hour 30 minutes, December 8, 2010.** The instructor is Michael Schnieders, Water Systems Engineering Inc. Garner motioned to assign **1.5 CECs**, Byrd seconded. The vote was all in favor.
- **“The Nebraska Grout Task Force Research: Unexpected Results – New Solutions” (this is the 2011 McElhiney Lecture) one (1) hour 30 minutes, December 8, 2010.** The instructor is Tom Cristopherson, Water Well Standards Program. Byrd motioned to assign **1.5 CECs**, Garner seconded. The vote was all in favor.
- **“Killer Contract Clauses” one (1) hour 30 minutes, December 9, 2010.** The instructor is Donald Gregory, Degler Brown Hill & Ritter. McInnis motioned to assign **1.5 CECs**, Garner seconded. The vote was all in favor.
- **“The Business of Groundwater Consulting” one (1) hour, December 9, 2010.** The instructor is Joan Berkowitz, Farkas Berkowitz & Company. Byrd motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
- **“The Challenges and Opportunities of the Water Business” one (1) hour,**

- December 9, 2010.** The instructor is Steve Maxwell, TechKNOWLEDGEy Strategic Group. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
- **“Well Design and Unintended Consequences” two (2) hours, December 9, 2010.** The instructor is David L. Kill, Goulds Pumps. Garner motioned to assign **two (2) CECs**, Byrd seconded. The vote was all in favor.
 - **“New Gadgets and Gizmos” one (1) hour 30 minutes, December 9, 2010.** The instructor is Roger E. Renner, E.H. Renner & Sons Inc. Garner motioned to assign **1.5 CECs**, McInnis seconded. The vote was all in favor.
 - **“Be a Part of the Future: NGWA’s Director Candidate School” one (1) hour 30 minutes, December 9, 2010.** The instructor is Kevin B. McCray, NGWA. Garner motioned **not to assign CEC**, Byrd seconded. The vote was all in favor.
 - **“Reading the Road Ahead” one (1) hour 30 minutes, December 9, 2010.** The instructor is Joseph J. Hogan, The Hartford Insurance Group. McInnis motioned to assign **1.5 CECs in the safety/first aid/CPR category**, Byrd seconded. The vote was all in favor.
 - **“Best Suggested Practices for Aquifer Storage and Recovery” one (1) hour 30 minutes, December 9, 2010.** The instructor is Jonathan Jenkins, NGWA. Garner motioned to assign **1.5 CECs**, Byrd seconded. The vote was all in favor.
 - **“How State Associations Can Hold Public Awareness Events Called Outdoor Field Conferences” one (1) hour, December 9, 2010.** The instructor is Todd Giddings, Todd Giddings and Associates Inc. Garner motioned to assign **one (1) CEC**, McInnis seconded. The vote was all in favor.
 - **“Best Suggested Practices for Groundwater Systems Inspection” one (1) hour 30 minutes, December 9, 2010.** The instructor is Jonathan Jenkins, NGWA. McInnis motioned to assign **1.5 CECs**, Byrd seconded. The vote was all in favor.
 - **“Best Suggested Practices to Reduce Problematic Concentrations of Perchlorate In Residential Well Systems” one (1) hour 30 minutes, December 9, 2010.** The instructor is Jonathan Jenkins, NGWA. Garner motioned to assign **1.5 CECs**, McInnis seconded. The vote was all in favor.
 - **“In Situ Groundwater Arsenic Removal Using Iron Oxide Coated Sand” one (1) hour, December 9, 2010.** The instructor is Thomas Sunday Abia II, Texas A&M University. McInnis motioned to assign **one (1) CEC**, Daugherty seconded. The vote was all in favor.
 - **“Well Maintenance and Rehabilitation” one (1) hour 30 minutes, December 9, 2010.** The instructor is Kevin McGinnis, Cotey Chemical Corp. McInnis motioned to assign **1.5 CECs**, Garner seconded. The vote was all in favor.
 - **“FMCSA: Checking Your Company’s DOT Record Lab” one (1) hour 30 minutes, December 9, 2010.** The instructor is Gary LaBrake, On the Road. McInnis motioned to assign **1.5 CECs in the safety/first aid/CPR category**, Garner seconded. The vote was all in favor.

The Cont. Ed. Committee reviewed the courses that comprise the **“WSGWA Fall 2010 CEU**

Seminar” scheduled for **November 5, 2010, in Spokane, WA; November 19, 2010, in Tacoma, WA, and November 20, 2010, in Kelso, WA.** The CEU Seminars are sponsored by the **WSGWA.** The courses were reviewed as follows:

- **“Ground Water & GPS” two (2) hours.** The instructor is John Vaccaro, USGS. Byrd motioned to assign **two (2) CECs,** McInnis seconded. The vote was all in favor.
- **“RCW/WAC Update for Pump Installers” four (4) hours, and “2008 NEC Update” four (4) hours.** The instructor is Roger Chick. McInnis motioned **not to assign CECs for the RCW/WAC Update portion,** Byrd seconded. The vote was all in favor. McInnis motioned to assign **two (2) CECs for the 2008 NEC Update portion,** Byrd seconded. The vote was all in favor.

D) Review of Documentation
None

E) Public Comment
None

F) Future Meeting
TBD

Adjourn